



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,483	09/28/2001	Hideaki Takahashi	ASA-1035	2770
75	90 06/16/2004		EXAMI	NER
Mattingly, Star	nger & Malur, P.C.		TU, CHRISTINE TRINH LE	
Suite 370 1800 diagonal R	load		ART UNIT	PAPER NUMBER
Alexandria, VA			2133	
			DATE MAILED: 06/16/2004	5

Please find below and/or attached an Office communication concerning this application or proceeding.

St

•		Application No.	Applicant(s)	(			
		09/964,483	TAKAHASHI ET AL.	`			
	Office Action Summary	Examiner	Art Unit				
		Christine T. Tu	2133				
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet w	ith the correspondence address				
THE - Exte after - If the - If NO - Failt Any	MAILING DATE OF THIS COMMUNICATION.  Insions of time may be available under the provisions of 37 CFR 1.13  SIX (6) MONTHS from the mailing date of this communication.  In period for reply specified above is less than thirty (30) days, a reply operiod for reply is specified above, the maximum statutory period ware to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing led patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a y within the statutory minimum of thi will apply and will expire SIX (6) MOI, cause the application to become A	reply be timely filed rty (30) days will be considered timely. NTHS from the mailing date of this communication BANDONED (35 U.S.C. § 133).	on.			
Status							
1) 又	Responsive to communication(s) filed on 28 Se	eptember 2001.					
	· · · · · · · · · · · · · · · · · · ·	action is non-final.					
3)	,						
Disposit	ion of Claims						
5)⊠ 6)⊠ 7)□	Claim(s) <u>1-23</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdraw Claim(s) <u>1-17,22 and 23</u> is/are allowed.  Claim(s) <u>18-21</u> is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or	vn from consideration.					
Applicat	ion Papers						
10)⊠	The specification is objected to by the Examine The drawing(s) filed on <u>28 September 2001</u> is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction The oath or declaration is objected to by the Example 1.	nre: a)⊠ accepted or b)[ drawing(s) be held in abeya ion is required if the drawing	nce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.121(	(d).			
Priority ι	ınder 35 U.S.C. § 119						
a)	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau See the attached detailed Office action for a list of	s have been received. s have been received in A ity documents have been (PCT Rule 17.2(a)).	Application No  received in this National Stage				
2)  Notic 3)  Inforr Pape	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	Paper No(	Summary (PTO-413) s)/Mail Date nformal Patent Application (PTO-152) 				

Page 2

Application/Control Number: 09/964,483

Art Unit: 2133

# Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 18-21 are rejected under 35 U.S.C. 102b) as being anticipated by Tamamura et al. (5,579,236 and Tamamura hereinafter).

### Claims 18, 19 and 21:

Tamamura teaches (figure 1) that within a semiconductor apparatus, a signal generating source (1) generates an analog voltage at terminal "b" and is connected to a DUT. The analog voltage at terminal "b" is also fed back to a current measuring circuit (3), then the current measuring circuit outputs a voltage measure value V<sub>MOUT</sub> to be fed back into the signal generating source (1) (figure 1, column 1 lines 9-14, column 5 lines 9-column 6 line 5).

#### Claim 20:

Tamamura shows (figure 1) that the signal generating source (1) comprises a DAC (12) for converting a digital signal into an analog signal and such an analog signal later is outputting as  $V_{out}$ .

Application/Control Number: 09/964,483 Page 3

Art Unit: 2133

## Allowable Subject Matter

2. The following is a statement of reasons for the indication of allowable subject matter:

3. The present invention pertains a semiconductor apparatus having an analog generating circuit.

The prior arts of record, however, does not teach an analog generation circuit including a resistive element, a capacitive element and switching element(s) for generating a voltage determined by a conduction time of the switching element and by a time constant of the resistive and capacitive elements based on a current flowing through the resistive element controlled by turning ON and OFF of the switching element(s), wherein the output voltage of the analog generation circuit is bed back to the analog generation circuit for generating the output voltage according to the fed-back voltage.

The prior arts of record does not teach the analog cell including variable wiring means having switching element s for connecting or disconnecting a plurality of signal lines for connection of the analog generation circuit with at least another variable logic circuit and signal lines mutually intersected, and wiring-line connection state memory mans for storing states of the switching elements of the variable wiring means.

Thus claims 1-17 and 22-23 are allowable over the prior arts of record.

4. Claim1-17 and 22-23 allowed.

Application/Control Number: 09/964,483

Art Unit: 2133

Page 4

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine T. Tu whose telephone number is (703)305-9689. The examiner can normally be reached on Mon-Thur. 8:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (703)305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christine T. Tu
Primary Examiner
Art Unit 2133

June 3, 2004